

IN THE CLAIMS:

Please amend the claims as follows.

Claim 1 (Currently Amended): A photodetector comprising:

$(K \times M \times N)$ photodiodes $PD_{k,m,n}$ (K being an integer of no less than 2; k being integers of no less than 1 and no more than K ; M being an integer of no less than 1; m being integers of no less than 1 and no more than M ; N being an integer of no less than 2; and n being integers of no less than 1 and no more than N), each generating an electric charge by an amount corresponding to an intensity of light incident thereon;

$(M \times N)$ integrating circuits, one of each being provided in correspondence to K photodiodes $PD_{k,m,n}$ ($k = 1$ to K) among the $(K \times M \times N)$ photodiodes $PD_{k,m,n}$ and each successively inputting and accumulating the electric charges generated at the K photodiodes $PD_{k,m,n}$ ($k = 1$ to K) and outputting a voltage that is in accordance with the amount of the accumulated electric charges; and

A/D converting circuits, each A/D converting circuit being provided in correspondence to one of said $(M \times N)$ integrating circuits, and outputting a digital value according to the voltage outputted from the corresponding integrating circuit,

wherein the $(K \times M \times N)$ photodiodes $PD_{k,m,n}$ are arranged in M rows and $(K \times N)$ columns either two-dimensionally (when $M = 2$) or one-dimensionally (when $M = 1$), with each photodiode $PD_{k,m,n}$ being positioned at the position of the m -th row and $(n + (k - 1)N)$ -th column,

switches $SW_{k,m,n}$ are provided in a one-to-one correspondence with respect to photodiodes $PD_{k,m,n}$ and are arranged between the photodiodes $PD_{k,m,n}$ and signal lines $SL_{m,n}$,

each set of K photodiodes $PD_{k,m,n}$ ($k=1$ to K) is connected via the corresponding switches $SW_{k,m,n}$ to a signal line $SL_{m,n}$, each signal line $SL_{m,n}$ is connected to an input end of an integrating circuit, and switches $SW_{k,m,n}$ on the same row are connected to the same control line $CL_{k,n}$, and the opening/closing of each row of switches $SW_{k,m,n}$ is controlled together by a control signal that is transmitted via the control line $CL_{k,n}$.

Claim 2 (Original): The photodetector according to Claim 1, further comprising CDS circuits, each being arranged between said integrating circuit and said A/D converting circuit, inputting the voltage output from the integrating circuit, and outputting a voltage expressing the fluctuation of the input voltage over a fixed time.

Claim 3 (Canceled).